

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO.   | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|------------------|----------------------|-------------------------|------------------|
| 09/446,521  | 03/03/2000       | YOSHIKI NAKAGAWA     | 1581/00180              | 2445             |
| 7590 10/28/2002 BURTON A AMERNICK POLLOCK VANDE SANDE & AMERNICK PO BOX 19088 |                  |                      | ,                       |                  |
|   |                  |                      | EXAMINER                |                  |
|   |                  |                      | MULLIS, JEFFREY C       |                  |
| WASHINGTON  | N, DC 20036-3425 |                      | ART UNIT                | PAPER NUMBER     |
|   |                  |                      | 17,11                   | 119              |
|   |                  |                      | DATE MAILED: 10/28/2002 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| -   |   | Application No.                   | Applicant(s)   |  |  |  |
|---|---|-----------------------------------|--|--|--|--|
| Office Action Summary   |   | 09/446,521                        | NAKAGAWA ET AL.  |  |  |  |
|   |   | Examiner                          | Art Unit   |  |  |  |
|   |   | Jeffrey C. Mullis                 | 1711   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |                                   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |   |                                   |  |  |  |  |
| 1)⊠   | Responsive to communication(s) filed on 12  | <u>August 2002</u> .              |  |  |  |  |
| 2a) <u></u> □   | This action is <b>FINAL</b> . 2b)⊠ T  | his action is non-final.          |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims   |   |                                   |  |  |  |  |
| 4)⊠   | Claim(s) 33-62 is/are pending in the applicati  | on.                               |  |  |  |  |
| 4a) Of the above claim(s) 36,54,55 and 57-61 is/are withdrawn from consideration.   |   |                                   |  |  |  |  |
| 5)  | 5) Claim(s) is/are allowed.   |                                   |  |  |  |  |
| 6)⊠   | 6)⊠ Claim(s) <u>33-35 37-53 56 62</u> is/are rejected.  |                                   |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |                                   |  |  |  |  |
| 8)[   |   |                                   |  |  |  |  |
| Application Papers  |   |                                   |  |  |  |  |
| 9) 🗌 -  | The specification is objected to by the Examin  | er.                               |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |                                   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |                                   |  |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |   |                                   |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |   |                                   |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |   |                                   |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |   |                                   |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |                                   |  |  |  |  |
| a)[   | a) All b) Some * c) None of:  |                                   |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |   |                                   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |                                   |  |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |   |                                   |  |  |  |  |
| 14) 🗌 A   | cknowledgment is made of a claim for domest   | ic priority under 35 U.S.C. § 119 | 9(e) (to a provisional application).                         |  |  |  |
| a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |   |                                   |  |  |  |  |
| Attachment  |   |                                   |  |  |  |  |
| 2) Notice 3) Inform   | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informa              | ary (PTO-413) Paper No(s)<br>al Patent Application (PTO-152) |  |  |  |
| I.S. Patent and Tr<br>PTO-326 (Rev  |   | ction Summary                     | Part of Paper No. 19   |  |  |  |

Serial No. 09/446,521

Art Unit 1711

Applicants' Abstract is not in the form of a single paragraph. Correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 33-35, 37-53, 56 and 62 are rejected under 35 U.S.C. § 102(e) as being anticipated by Matyjaszewski et al. (USP 5,789,487).

Matyjaszewski et al. disclose a process in which an omega, halo, alkenyl terminated monomer is polymerized under stable free radical conditions to produce macromolecular materials containing

Serial No. 09/446,521

Art Unit 1711

terminal alkenyl groups. Note scheme 5 in this regard. The alkenyl group containing macromolecule can be combined with a second monomer under stable free radical conditions such as those skilled in the art would realize would generate a second sequence comprised of the second monomer such as would be embraced by applicants' multiblock copolymers. Note column 22 lines 46-51 in this regard. Note also column 23 lines 36-50 for an example in which a 2-(2-bromopropionoxy)ethyl acrylate is polymerized and the resulting polymer used as a macroinitiator for polymerizing butyl acrylate, such as would generate butyl acrylate blocks. The materials of the above type can be viewed as non-linear block copolymers embraced by applicants' multiblock copolymers.

The above rejection has been rewritten to better address applicants' claims as now amended.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc
October 25, 2002

Jeffrey Mullis Primary Examiner Art Unit 1711